EXHIBIT H

PART 4

- 1 secondary source or a different source other than
- 2 the articles themselves?
- 3 A. If I don't find it in these articles, then
- 4 I will look at other Barnett publications.
- 5 Q. Okay. So you would refer to other Barnett
- 6 publications in order to make your determination as
- 7 to whether or not he relied on field experience in
- 8 Switalski Exhibit 3 through five?
- 9 A. Yes.
- 10 Q. But those would be published papers?
- 11 A. Yes.
- 12 Q. What I am trying to find out,
- 13 Mr. Switalski, is is there any source of
- 14 information you would have other than the published
- 15 documents by Professor Barnett that you would be
- 16 using to make that determination?
- 17 A. Well, I indicated earlier that I know that
- 18 with regard to accident statistic literature, that
- 19 one of more authors has drawn the correlation
- 20 between riding the pedal, inadequate press guarding
- 21 and amputation injuries. If I am going to need to
- 22 be expressing opinions or I am requested to express
- 23 opinions about that or to at least support that
- 24 statement, I will gather that literature.

- 1 BY MR. HARTMAN:
- 2 Q. Now, you are going on an issue. I don't
- 3 think you understand my question. Maybe you do you
- 4 but I want to make sure you understand my question.
- 5 My question is with regard Professor
- 6 Barnett, your statement is that in his articles he
- 7 relied upon field experience?
- 8 A. Yes.
- 9 Q. In order for you to make the determination
- 10 that Professor Barnett relied upon field
- 11 experience, you are going to look to other articles
- 12 written by Professor Barnett?
- 13 A. Yes.
- 14 Q. That's the only way you would tell if
- 15 Professor Barnett relied on field experience?
- 16 A. Yes, other than asking him directly.
- 17 Q. Right. I mean the reason I am asking is
- 18 maybe there is a big database that you have or that
- 19 you are aware of that would have working papers for
- 20 these articles that you are attempting to refer to
- 21 or something.
- 22 A. Well, any database that might exist for
- 23 these articles would be in Professor Barnett's
- 24 control if they exist any longer.

- 1 Q. Okay. So you are going to look at the
- 2 articles to make that determination?
- 3 A. Yes, yes.
- 4 Q. Thank you. I am just trying to clarify
- 5 things. I mean it sounds like you know --
- 6 MR. ROBINSON: You are not going to limit him
- 7 to what he can or can't do to follow up in the
- 8 areas of inquiry. If he thinks of something else
- 9 he can do, talk Professor Barnett, whatever the
- 10 case may be, then I don't want your questions to
- 11 suggest that he is limited in some way. He can do
- 12 whatever he wants that would enable him to have as
- 13 much information as he can on any of these issues.
- 14 If you are concerned about a database, then perhaps
- 15 you should ask him is there a database.
- 16 MR. HARTMAN: I just did.
- 17 MR. ROBINSON: It took a long time to get
- 18 there.
- 19 MR. HARTMAN: Paul, I am going to get to where
- 20 I want to go the way I want.
- 21 MR. ROBINSON: I understand you are going to do
- 22 that.
- 23 MR. HARTMAN: Then please let me ask my
- 24 questions.

- 1 MR. ROBINSON: I haven't interrupted your
- 2 questions.
- 3 BY MR. HARTMAN:
- 4 Q. Sir, I am not trying to limit you. I am
- 5 trying to find out what your decision-making
- 6 process will be in order to make a determination
- 7 that Professor Barnett's articles include field
- 8 experience; do you understand?
- 9 A. Yes.
- 10 Q. And my understanding is is that your
- 11 decision-making process to make that determination
- 12 will be by reviewing other articles written by
- 13 Professor Barnett to see if they refer to field
- 14 experience; am I correct?
- 15 A. Yes, but I will refer to the ones already
- 16 marked as exhibits first just in the interest of
- 17 not taking the time today during the deposition to
- 18 do it.
- 19 Q. And those are Exhibit 2 through 5?
- 20 A. Yes.
- Q. And then you will look at other Professor
- 22 Barnett articles as well?
- 23 MR. ROBINSON: Mr. Hartman, he said it ten
- 24 times at least, yes, he is going to do that.

- 1 THE WITNESS: Yes.
- 2 MR. HARTMAN: Your statement is longer than my
- 3 next question, Paul.
- 4 MR. ROBINSON: It doesn't matter. You took how
- 5 long to get the same question. It is frustrating.
- 6 I apologize for my frustration but that was just a
- 7 ten-minute diatribe as to what he going to do to
- 8 follow up.
- 9 MR. HARTMAN: Okay. I don't think so but you
- 10 are entitled to your opinion.
- 11 BY MR. HARTMAN:
- 12 Q. On page 5 of your report after the quote
- 13 of foot controls must be guarded, please note that
- 14 OSHA does not require the foot control to prevent
- 15 accidental activation by the foot control user but
- 16 rather by another worker; am I correct?
- 17 A. Yes.
- 18 Q. Okay. Would you explain what you mean by
- 19 that?
- 20 A. Well, I am quoting out of OSHA Publication
- 21 3170, Safeguarding Workers and Protecting Workers
- 22 From Amputations. In their publication I think
- 23 OSHA correctly recognizes that nothing can be done
- 24 to prevent the person who is expected and

- 1 anticipated to activate the foot control to also
- 2 somehow prevent the same person from accidentally
- 3 activating the same foot control.
- 4 But what can be done is preventing other
- 5 workers from accidentally activating the foot
- 6 control and that basically means disconnecting it
- 7 when it is not in use, when the main operator is
- 8 not present or blocking the pedal so that it can
- 9 physically not be pushed down.
- 10 BY MR. HARTMAN:
- 11 Q. So what you are saying, am I correct, is
- 12 that OSHA when it talks about prevent accidental
- 13 activation by the foot pedal, they are talking
- 14 about all the time preventing it?
- 15 A. Yes, in -- preventing the machine tool
- 16 from being operated the way it was intended to be
- 17 operated at times when it is not desired to operate
- 18 it.
- 19 Q. But OSHA doesn't talk about inhibiting the
- 20 accidental activation of the foot pedal?
- A. No, they don't.
- 22 Q. And they don't talk about inhibiting the
- 23 accidental activation of the foot control?
- A. No, they don't.

- 1 Q. Okay. So prevention it means so it never
- 2 happens?
- 3 MR. ROBINSON: Objection to --
- 4 BY MR. HARTMAN:
- 5 Q. As opposed to inhibiting meaning trying to
- 6 prevent to the best means possible; am I correct?
- 7 MR. ROBINSON: Objection to the form.
- 8 THE WITNESS: Yes.
- 9 BY MR. HARTMAN:
- 10 Q. So your understanding of inhibiting means
- 11 trying to prevent it to the best possible and -- am
- 12 I correct?
- MR. ROBINSON: Objection to the form.
- 14 BY MR. HARTMAN:
- 15 Q. What does inhibit mean?
- 16 A. To make less likely.
- 17 Q. And what does prevent mean?
- 18 A. To prevent means to -- what would be a
- 19 good word -- remove any potential for a certain
- 20 event from occurring.
- Q. Okay. So when they are talking about
- 22 preventing, they are talking about a complete
- 23 elimination of accidental activation?
- 24 MR. ROBINSON: Objection to the form.

- 1 THE WITNESS: Yes.
- 2 BY MR. HARTMAN:
- 3 Q. And when I say they, I am talking about
- 4 OSHA; you understand that?
- 5 A. Yes.
- 6 Q. Your next paragraph says, the foot control
- 7 involved in Ms. Lindquist's accident had two
- 8 additional features to protect against inadvertent
- 9 activation of the foot pedal. The pedal was
- 10 equipped with side guards as well as a toe latch
- 11 feature that required the operator to fully insert
- 12 their foot into the pedal guard and push a latch
- 13 rearward before the pedal could be depressed; did
- 14 I read that accurately?
- 15 A. Yes.
- 16 Q. And is that correct today?
- 17 A. I believe so, yes.
- 18 Q. Okay. So the pedal that was involved in
- 19 this accident had features that would protect
- 20 against inadvertent activation?
- 21 A. Yes, it did.
- 22 Q. One was a toe latch?
- 23 A. Yes.
- Q. And one was a foot, a HOOD over the pedal?

- 1 A. Yes, and the other were side guards.
- Q. And side guards. Okay. I should have
- 3 said the full cover. When I said cover, I thought
- 4 a cover was side guards included but okay.
- 5 I wasn't trying to mislead you.
- 6 Do you know whether or not the toe latch
- 7 provides protection from riding the pedal? And it
- 8 is if you know, sir.
- 9 MR. ROBINSON: I am not sure what that means.
- 10 If he has an opinion on it then --
- 11 THE WITNESS: I think in some instances it does
- 12 and in some instances it does not. If the operator
- 13 rides the pedal in such a way that the foot is kept
- 14 fully inserted into the foot switch housing, it
- 15 does not provide protection against riding the
- 16 pedal. If the operator keeps their foot partially
- 17 inserted into the foot switch housing, then the
- 18 latch will in effect latch the pedal in the
- 19 unactivated position and provide protection against
- 20 riding the pedal.
- 21 BY MR. HARTMAN:
- 22 Q. Your next paragraph says the 2002 safety
- 23 standard for press brakes additionally recognizes
- 24 the hazard associated with unattended actuation of

- 1 the foot operating means; am I correct?
- A. Yes.
- 3 Q. Is that an accurate statement?
- 4 A. Yes.
- 5 Q. Was that hazard also known in 1978?
- 6 MR. ROBINSON: Objection to the form.
- 7 THE WITNESS: I believe it was, yes.
- 8 BY MR. HARTMAN:
- 9 Q. With the adoption -- strike that.
- 10 In 1973 was it known to the industry as a
- 11 whole that there was a hazard associated with the
- 12 unintended actuation of the foot operating means?
- MR. ROBINSON: Objection to the form.
- 14 THE WITNESS: I am sorry. Was it known to who?
- 15 BY MR. HARTMAN:
- 16 Q. Industrywide.
- 17 A. Industrywide?
- 18 I don't know I wasn't around in 1978 what
- 19 the industry knew or didn't know. What I do know
- 20 is when the safety standard addressed the need or a
- 21 requirement to have a supervisory key selector
- 22 switch between hand and foot and that was in 2002.
- Q. Do you know of whether or not there is a
- 24 hazard associated with accidental activation of a

- 1 foot control in conjunction with the use of a press
- 2 brake?
- 3 MR. ROBINSON: Objection to the form.
- 4 THE WITNESS: Can I hear that question once
- 5 more, please?
- 6 (Whereupon, the record was
- 7 read.)
- 8 THE WITNESS: Yes, there is a hazard associated
- 9 with accidental activation of any kind of control
- 10 including foot controls; and it doesn't matter what
- 11 kind of machine it is associated with.
- 12 BY MR. HARTMAN:
- 13 Q. And how long have you known that?
- 14 A. Probably most of my life. I can't put a
- 15 specific time or date on it. It seems like a
- 16 rather obvious statement.
- 17 Q. Okay. So it is almost an intuitive
- 18 statement to you?
- 19 A. Yes.
- 20 Q. When did you graduate college?
- 21 A. 1980 the first time.
- 22 Q. When you graduated college, did you know
- 23 that there was a hazard associated with the
- 24 unintended activation of a machine?

- 1 A. I suspect I did.
- Q. It is my understanding that there are two
- 3 general classifications of people that will work on
- 4 press brakes. One is a setup individual and one is
- 5 an operator; am I correct?
- 6 MR. ROBINSON: Objection to the form.
- 7 THE WITNESS: Larger press shops will also have
- 8 a maintenance department but very -- setup is
- 9 considered a subset of maintenance. So if we say
- 10 maintenance and operation, I go with you a hundred
- 11 percent.
- 12 BY MR. HARTMAN:
- 13 Q. How about if we go maintenance, setup and
- 14 operator; is that easier?
- 15 A. That's fine.
- 16 Q. Do you have an opinion as to whether or
- 17 not a press brake manufacturer has an obligation to
- 18 manufacture the press brake so as to protect all
- 19 three individuals, types of individuals that will
- 20 come in contact with the machine?
- 21 MR. ROBINSON: Objection to the form, asked and
- 22 answered.
- THE WITNESS: I think basically the same
- 24 regulations that apply to the press operator also

- 1 apply to setup and maintenance personnel. However,
- 2 because the setup and maintenance personnel because
- 3 of the nature of what they are doing, have to have
- 4 their hands in the dye area because they are the
- 5 ones installing and removing the dyes, there is a
- 6 little bit higher degree of care that one has to
- 7 exercise to protect themselves.
- 8 BY MR. HARTMAN:
- 9 Q. But the machine manufacturer's
- 10 responsibilities to your understanding extend to
- 11 the setup individual, the maintenance man and the
- 12 operator to the extent the machine operator -- the
- 13 machine manufacturer has responsibility?
- MR. ROBINSON: Objection to the form.
- 15 THE WITNESS: Yes.
- 16 BY MR. HARTMAN:
- 17 Q. Now, am I correct that with regard to
- 18 press brakes, it is foreseeable that operators will
- 19 have their hands in the dye area?
- 20 MR. ROBINSON: Objection to the form.
- 21 THE WITNESS: Yes, I think there is a pattern
- 22 of operators reaching into the dye space or point
- 23 of operation.

1 BY MR. HARTMAN:

- 2 Q. In fact some of the operator protective
- 3 systems are designed so that while a worker's hands
- 4 are in a dye area, if the dye begins closing,
- 5 mechanically their hands are removed from that
- 6 area; am I correct?
- 7 A. Yes, I believe you are referring to the
- 8 pull-back or pull-out device.
- 9 Q. A present sensing device would work in a
- 10 way that would allow a worker to put their hand in
- 11 the dye area, do some work and remove it before the
- 12 machine could be activated; am I correct?
- 13 A. That's correct. The present sensing
- 14 device, however, does not have the ability to pull
- 15 the hands out.
- 16 Q. Correct, correct.
- 17 I would refer you to your report on
- 18 page 6, please, first full paragraph beginning with
- 19 the fourth line down it says, as OSHA 3170 has
- 20 correctly pointed out, the electric foot control
- 21 works best when the operator is in a sitting
- 22 position. Did I accurately read your report?
- 23 A. Yes.
- Q. Would it be a correct statement to say

- 1 that the sitting position is the best position for
- 2 which an operator should utilize a foot control?
- 3 MR. ROBINSON: Object to the form.
- 4 THE WITNESS: It is not necessarily the best.
- 5 It is certainly an acceptable means of using a foot
- 6 control. But if balance is the concern -- and
- 7 I think balance is something that Professor Barnett
- 8 focused on in his report -- then sitting is the
- 9 best.
- 10 BY MR. HARTMAN:
- 11 Q. So if Ms. Lindquist was operating the
- 12 press brake at the time of her injury by sitting
- down with the foot control by her side, that is not
- 14 something that you would find fault with?
- MR. ROBINSON: Object to the form.
- 16 THE WITNESS: I would not.
- 17 BY MR. HARTMAN:
- 18 Q. And your next sentence says, the sitting
- 19 position all but eliminates the problem of
- 20 balancing one's self on one foot and reduces the
- 21 physical fatigue associated with high pedal
- 22 activation forces and large pedal movements,
- 23 correct?
- 24 A. Yes.

- 1 Q. Do you agree with that statement?
- 2 A. Yes, of course, I wrote it.
- 3 Q. Sometimes experts in my experience have
- 4 had changes or misstated or misread something or
- 5 have found something, I am just clarifying your
- 6 status as of today. I am not implying that you
- 7 should. I just want to make sure we know what the
- 8 status of your opinions are as of today.
- 9 A. Okay. Understood.
- 10 Q. Your next sentence says, the electric foot
- 11 control can also be utilized by standing as well as
- 12 a seated operator; am I correct?
- 13 A. Yes.
- 14 Q. So am I correct if Ms. Lindquist was using
- 15 the foot pedal and it had by her side when she was
- 16 working on her machine on the day of the accident,
- 17 the fact she was standing and using the foot pedal
- 18 would not be a problem to you?
- MR. ROBINSON: Objection to the form.
- 20 THE WITNESS: No.
- 21 BY MR. HARTMAN:
- Q. Okay. Your next paragraph says, there are
- 23 acceptable applications for both the electric foot
- 24 controls as well as the mechanical foot pedal.

- 1 Only the press user is capable of making an
- 2 appropriate decision regarding which style of
- 3 control is the best and safest use for a given
- 4 production run; am I correct?
- 5 A. Yes.
- 6 Q. Did I accurately read your statement?
- 7 A. You did, yes.
- 8 Q. When you talk about the press user, am
- 9 I correct we are talking about the employer as
- 10 opposed to the operator?
- 11 A. The operator is certainly a user of the
- 12 press. They are the ultimate user.
- 13 Q. Well, am I correct that user is routinely
- 14 defined in the industry as the company that's using
- 15 the press brake as opposed to the operator?
- 16 Operators tend to be referred to as operators.
- 17 Users are --
- 18 A. Yes, I agree that many standards make that
- 19 distinction between users and operators.
- 20 MR. ROBINSON: Please give me time to
- 21 interject.
- 22 Objection to the form. You didn't communicate
- 23 as to what standard. It is just very confusing.

- 1 BY MR. HARTMAN:
- Q. When you talk about user in the context of
- 3 press brake, we are talking about the employer and
- 4 the setup people for the employer; am I correct?
- 5 MR. ROBINSON: Let me object. You have asked
- 6 it. He has answered it. He has indicated the
- 7 employee is the ultimate user. You can't just now
- 8 ask it again to try to get a different answer.
- 9 MR. HARTMAN: I can do whatever I want.
- 10 MR. ROBINSON: That would be improper for you
- 11 to do that. Objection, asked and answered.
- 12 MR. HARTMAN: Well, you are implying that
- 13 you are doing it. I am not doing it. I am trying
- 14 to make sure we have a dialogue here where we both
- 15 understand what's going on.
- MR. ROBINSON: No, that's not what's going on.
- 17 MR. HARTMAN: Because up until now I don't
- 18 think you understand that there was a difference
- 19 between the user and what --
- 20 MR. ROBINSON: I don't need snide comments
- 21 about what I understand and what I don't
- 22 understand. Let's just ask the question.
- 23 BY MR. HARTMAN:
- Q. In the press brake industry, who is the

- 1 user?
- A. Well, the user certainly includes the
- 3 employer, the maintenance people, the setup people
- 4 and the operator, although there are a whole bunch
- 5 of special rules that apply to the operator as
- 6 well. But they are all users of the machine.
- 7 Q. But the rules with regard to the tooling
- 8 and operating arrangement are directed toward the
- 9 setup person and the employer; am I correct?
- 10 MR. ROBINSON: Objection to the form.
- 11 THE WITNESS: Yes, everything having to do with
- 12 setup falls into the maintenance category.
- 13 BY MR. HARTMAN:
- 14 Q. And an operator that's not also a setup
- 15 individual does not decide how the machine is set
- 16 up with regard to a foot control or a tool pump by
- 17 the switch; am I correct?
- 18 MR. ROBINSON: Objection to the form. In any
- 19 situation? In any employer's shop? In any
- 20 manufacturing plant? Is that what you are asking
- 21 him to comment upon?
- 22 MR. HARTMAN: I think he understands.
- 23 MR. ROBINSON: I am asking for clarification of
- 24 the question.

- 1 MR. HARTMAN: I am asking him to answer.
- 2 MR. ROBINSON: Objection to the form.
- 3 THE WITNESS: I think you drew the distinction
- 4 of an operator who is not part of the setup group.
- 5 BY MR. HARTMAN:
- 6 Q. Correct.
- 7 A. Yes, that operator is not the one that's
- 8 supposed to be making the decision or supervising
- 9 how the machine is set up for them to use.
- 10 Q. And a supervisory switch is called a
- 11 supervisory switch because you are expecting a
- 12 supervisor to make the decision as to foot control,
- 13 two palm button, am I correct?
- 14 A. Yes, absolutely.
- 15 Q. And you have read Ms. Lindquist's
- 16 deposition; am I correct?
- 17 A. I have.
- 18 Q. Is there anything in her deposition
- 19 testimony that leads you to believe that she also
- 20 performed the function of a setup person?
- 21 MR. ROBINSON: Object to the form.
- 22 THE WITNESS: There is not.
- 23 BY MR. HARTMAN:
- Q. Is there -- have you read the

- 1 co-employee's depositions?
- 2 A. Yes, I have.
- 3 Q. Is there anything that you have read in
- 4 any of the co-employee's depositions that led you
- 5 to believe that Ms. Lindquist was a setup person?
- 6 MR. ROBINSON: Object to the form. I don't
- 7 know how you are referencing setup. It seems you
- 8 are attempting to include the ability to move the
- 9 switch from two palm to foot control in setup.
- 10 I think that is misleading the way it is asked.
- 11 BY MR. HARTMAN:
- 12 Q. Is it my leading the way I asked it?
- MR. ROBINSON: I didn't say he thought it was
- 14 misleading.
- 15 MR. HARTMAN: I think the --
- 16 THE WITNESS: The answer to the question you
- 17 asked me is no.
- 18 BY MR. HARTMAN:
- 19 Q. No, there is nothing that you have read
- 20 that indicates Ms. Lindquist was a setup person,
- 21 correct?
- 22 A. Correct.
- 23 Q. Is there anything that you have read that
- 24 leads you to believe Ms. Lindquist could make the

- 1 decision to utilize the key function to switch the
- 2 machine from foot control to two palm button
- 3 switch?
- 4 A. I believe she testified she wasn't even
- 5 aware of the existence of the key. So she is not
- 6 in a position to make that decision.
- 7 Q. Is there anything that you have read about
- 8 Ms. Lindquist's ability and decision-making process
- 9 that would lead you to believe that she should be
- 10 entitled to make that decision as to utilize the
- 11 supervisory switch to make a change from foot
- 12 control to two palm button switch?
- 13 A. Not unless she was a -- qualified to
- 14 participate in setup of the press, she is not the
- one that's supposed to be making the decision.
- 16 Q. And I appreciate that. Is there anything
- 17 that you read that indicated that she was qualified
- 18 to be that person?
- 19 A. No.
- 20 Q. I need to see those three articles,
- 21 please, wherever they are.
- A. Right here.
- 23 MR. ROBINSON: Make sure we keep those
- 24 separate.

- 1 THE WITNESS: Sure. All the other ones that
- 2 are marked are here.
- 3 MR. ROBINSON: Great.
- 4 Do you know why I am receiving multiple faxes
- 5 from your office?
- 6 MR. HARTMAN: You shouldn't have any faxes.
- 7 MR. ROBINSON: I have two faxes so far. One is
- 8 a three-page, and one is a four-page.
- 9 MR. HARTMAN: Off the record.
- 10 MR. ROBINSON: I would like it on the record.
- 11 I would like all of our conversations on the
- 12 record. I am just asking if you know.
- 13 MR. HARTMAN: The only thing it would be is
- 14 I have assigned my office research as to what
- 15 I should do with regard to my inability to get
- 16 Dr. Hood (phonetic) for a deposition date within
- 17 the time. I have assigned that to Ray Conlon.
- 18 What he is doing, he is doing.
- 19 MR. ROBINSON: Thanks.
- 20 MR. HARTMAN: I have not seen anything today
- 21 that would say that there would be a fax coming.
- 22 MR. ROBINSON: I am telling you I have received
- 23 two faxes and I am just -- I received one Monday
- 24 before I left for my West Virginia mediations for

- 1 two days. And I am just curious if this is
- 2 something else I should be concerned about on a
- 3 Friday.
- 4 MR. HARTMAN: The only thing it would be would
- 5 be something with Dr. Hood if it is.
- 6 BY MR. HARTMAN:
- 7 Q. You indicate that on page 7, when a safety
- 8 system offers an accident hazard potential of its
- 9 own, there is unequivocal agreement in the safety
- 10 literature against the use of the safety system,
- 11 correct?
- 12 A. Yes.
- 13 Q. Then you indicate, the safety philosophy
- 14 is highlighted in the December 1982 publication by
- 15 Barnett and Hamilton, correct?
- 16 A. Yes.
- 17 Q. For example, the National Safety Council
- 18 wrote in 1995, it is a cardinal rule that
- 19 safeguarding one hazard should not create an
- 20 additional hazard, correct?
- A. Just one correction, in 1975, not '95.
- 22 Q. I am sorry. Okay.
- And the article you are referring to is
- 24 the Philosophical Aspects of Dangerous Safety

- 1 Systems, which is marked as Switalski No. 3?
- 2 A. Yes.
- 3 Q. You indicate -- you cite the National
- 4 Safety Council also, correct?
- 5 A. Yes.
- 6 Q. Do you deem the National Safety Council's
- 7 writings on foot controls to be authoritative in
- 8 your research?
- 9 MR. ROBINSON: Objection to the form. Which
- 10 one are you referring to?
- 11 THE WITNESS: To my knowledge the National
- 12 Safety Council doesn't have any publications
- 13 specific to foot controls. What I am citing is
- 14 their position on safe guarding one hazard should
- 15 not create an additional hazard.
- 16 BY MR. HARTMAN:
- 17 Q. Would the National Safety Council's
- 18 position on mechanical presses be authoritative for
- 19 your research?
- 20 MR. ROBINSON: Objection to the form.
- 21 Which one?
- MR. HARTMAN: I am just asking him generally.
- MR. ROBINSON: Generally is not the right way
- 24 to ask the question. Objection to the form.

- 1 MR. HARTMAN: I can ask it.
- 2 MR. ROBINSON: You can ask it. You are
- 3 correct.
- 4 THE WITNESS: That hasn't been determined yet.
- 5 I haven't looked at what the National Safety
- 6 Council has wrote with regard to mechanical power
- 7 presses.
- 8 BY MR. HARTMAN:
- 9 Q. So would you feel that you have the
- 10 ability to reject the National Safety Council's
- 11 position on a case-by-case basis?
- MR. ROBINSON: Objection to the form of the
- 13 question.
- 14 THE WITNESS: Yes, of course.
- 15 BY MR. HARTMAN:
- 16 Q. If you were -- strike that.
- 17 On page 8 it says, in February 1988
- 18 Barnett and the undersigned co-authored a
- 19 publication entitled Principles of Human Safety.
- 20 Did you author such a publication?
- 21 A. Yes.
- 22 Q. Do you have a copy of it with you?
- A. Yes, I do.
- Q. May I see it, please?

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1
              Would I be fair in stating that you
 2
     consider Principles of Human Safety an
 3
     authoritative document?
         Α.
 4
              Yes.
 5
         Q.
              Is it something that you would rely upon?
 6
         Α.
              I would and I have.
 7
         MR. HARTMAN:
                       Would you mark that?
                         (Whereupon, SWITALSKI Deposition
 8
                         Exhibit No. 6 was marked for
 9
10
                         identification.)
11
     BY MR. HARTMAN:
12
         Q.
              Would you describe Professor Barnett's
13
     involvement and your involvement with the article
14
     Principles of Human Safety?
              Yes, Principles of Human Safety was
15
         Α.
16
     originally written because Barnett was an invited
17
     author on a new textbook that was being developed
18
     for agricultural engineers in particular. However,
19
     he and I both saw a potential problem with the
20
     different invited authors that were to do different
21
     chapters. We knew that they were -- some people
22
     were very defense-oriented. Some people were very
23
     plaintiff-oriented in the world of litigation. And
24
     we suspected that the textbook would never come
```

- 1 together because different authors were expressing,
- 2 you know, not wanting to appear in the same
- 3 publication with some of the other authors. And
- 4 indeed that eventually is what happened.
- 5 So we were invited to write the chapter on
- 6 safety for this textbook and that chapter was
- 7 eventually published because it was written. We
- 8 finished it as the safety brief called Principles
- 9 of Human Safety. It also explains why most of the
- 10 examples in that paper are agricultural examples in
- 11 nature because of the original intent to be a
- 12 chapter in a book for agricultural engineering
- 13 students.
- 14 Q. Are you done?
- 15 A. Yes.
- 16 Q. What was your input to this article, what
- 17 section or can you describe it?
- 18 A. Yes, let me just see the front page there
- 19 with the table of contents.
- As you see, many of Barnett's already
- 21 existing publications are in effect reprinted in
- 22 here but with regard to, let's see here, in the
- 23 Roman numeral II, Part E, the zero mechanical state
- 24 and all of its subsections is the part that

- 1 I wrote.
- 2 Barnett and I collaborated a bit in the
- 3 warnings section, which is Roman numeral III-F
- 4 because that was new. That had not been published
- 5 before.
- 6 My assignment was also to put together the
- 7 references in the bibliography section.
- 8 Q. So your section zero mechanical state was
- 9 entirely yours?
- 10 A. Zero mechanical state, yes.
- 11 Q. Warnings was you and Barnett, a
- 12 collaboration, and then you put together the
- 13 references, et cetera?
- 14 A. Yes.
- 15 Q. The rest was Barnett?
- 16 A. The rest was Barnett. And as I said, for
- 17 the most part, it was a re-publication of a number
- 18 of earlier safety briefs.
- 19 Q. And that article is authoritative?
- 20 A. Yes.
- Q. Do you still use those principles today?
- A. I certainly did in this case so, yes.
- Q. And the new hazard that the gated foot
- 24 pedal presents is what?

- 1 A. It is -- the new hazard is the increase in
- 2 the likelihood that the user will misuse the
- 3 product by riding the pedal.
- 4 Q. Would it be a -- would I be accurate in
- 5 saying that if you did not believe -- strike that.
- 6 Would I be correct in saying if you
- 7 assumed that there would not be an increase in the
- 8 likelihood of riding the pedal at the front gate,
- 9 then the front gated foot control would be
- 10 appropriate in this situation?
- 11 MR. ROBINSON: Object to the form.
- 12 THE WITNESS: I think so, yes. The misuse of
- 13 riding the pedal is not necessarily the hazard but
- 14 the hazard that arises out of riding the pedal is
- 15 the amputation hazard in the machine that the pedal
- 16 is being used to control.
- 17 BY MR. HARTMAN:
- 18 Q. Right. The hazard associated with --
- 19 A. The point of operation.
- 20 Q. The hazard associated with unintended
- 21 activation of the foot control is amputation?
- 22 A. Yes.
- Q. And have you done any research to make a
- 24 determination as to whether or not the hazard of

- 1 riding the pedal with a foot cover is mitigated by
- 2 the trip latch?
- 3 MR. ROBINSON: Objection to the form.
- 4 THE WITNESS: I think I responded to a question
- 5 earlier about how the toe latch addresses some
- 6 riding-the-pedal scenarios, and it had to do with
- 7 how far the operator's foot is inserted into the
- 8 switch. So, again, I think I am basically going to
- 9 give the same answer.
- 10 Yes, it does help to mitigate
- 11 riding-the-pedal-type accidents because it does
- 12 prevent those that are associated with the
- 13 operator's foot not being inserted fully into the
- 14 foot switch.
- 15 BY MR. HARTMAN:
- 16 Q. You state next that individual designers
- 17 and manufacturers should not adopt a safety device
- 18 that creates a new hazard, correct?
- 19 A. Yes.
- Q. And those examples when a downside exists
- 21 with the use of a safety device, a value system
- 22 must weigh the upside and downside effect of the
- 23 particular safeguarding system, correct?
- 24 A. Yes.

- 1 Q. Would a value system be National Safety
- 2 Council?
- A. I don't think so, not the National Safety
- 4 Council. They are not a standards writing or
- 5 government authority. I don't think they would
- 6 rise to the level of a value system.
- 7 Q. Would OSHA be a value system?
- 8 A. Yes, because it carries with it the power
- 9 of law.
- 10 Q. Would ANSI be a value system?
- 11 A. Yes, or at least the committees within
- 12 ANSI, yes, consensus, more than one person, more
- 13 than one manufacturer being represented, that sort
- 14 of thing.
- 15 Q. How would you get ANSI's determination
- 16 that -- from a value system that the cause-benefit
- 17 should be adopted? How does ANSI tell you that?
- 18 A. It is ultimately not ANSI's decision. It
- is the committee operating under the ANSI umbrella.
- 20 It is basically done through a consensus and it
- 21 doesn't necessarily mean that a hundred percent of
- 22 the people vote in favor of or against either. It
- 23 is majority.
- Q. How does a manufacturer know that the

- 1 consensus has been reached? Otherwise -- if I am a
- 2 manufacturer and I want a point of operation to
- 3 protect a system on a machine that may have a
- 4 downside, how do I know that the ANSI consensus
- 5 says that's okay?
- 6 MR. ROBINSON: Object to the form.
- 7 BY MR. HARTMAN:
- 8 Q. Or would I ever know?
- 9 A. Because it is published in a standard.
- 10 Q. Okay. So -- if the -- I am -- if the ANSI
- 11 standard permits something, does that mean the
- 12 value system is okay?
- 13 A. It means that it has been judged to be
- 14 reasonably safe. Now sometimes -- sometimes the
- 15 value system -- let's say the Food and Drug
- 16 Administration approves a new drug and years down
- 17 the line some new side effect is found. And they
- 18 discover they have made a mistake, and the drug is
- 19 pulled off the market. But in effect the value
- 20 system in my opinion should be protecting that drug
- 21 manufacturer.
- Q. Okay. So if ANSI says -- ANSI will say it
- 23 is okay; that means the value system says it is
- 24 okay?